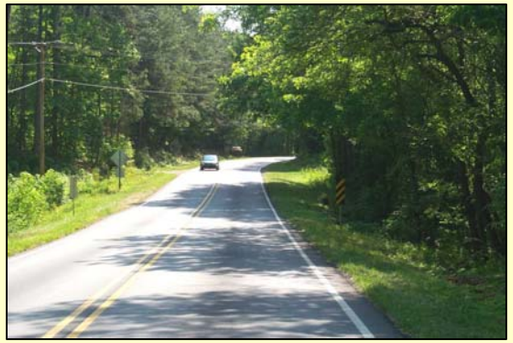
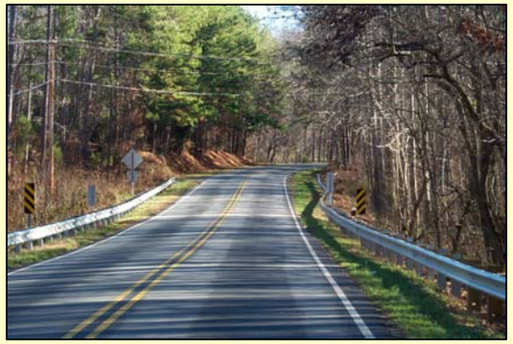
Crash and Safety Investigations

Regional Traffic Office staff investigate fatalities that occur on the state highway system to determine if immediate safety improvements are recommended. The recommended treatments from these investigations can range from installing signing to requesting a High Hazard Elimination project. Recommendations are discussed with necessary personnel (Division staff, city engineers, etc.) for concurrence of treatment and funding sources.



"Ran-Off-Road" fatal crash site.



Safety improvements installed to reduce the severity of "Ran-Off-Road" type crashes.

Highway Safety Improvement Program

Another task of the Regional Traffic Office staff is to investigate and make recommendations for locations identified by the Highway Safety Improvement Program. These locations are intersections, bridges or road sections that are experiencing safety problems based on their recent crash history. Highway Safety Program investigations are handled in much the same way as the fatal investigations mentioned above.

Special Traffic Engineering and Safety Studies

The Traffic Engineering Safety Programs Unit is instrumental in the development of special projects to address highway safety issues in North Carolina. Some examples of these studies include:

- ***Statewide Hazard Elimination and Rumble Strip Efforts*** - identify and analyze freeways with a high frequency of run-off-road crashes and produce a prioritized listing of improvement locations based on safety benefit-cost ratios.

- ***Interstate and Fully Controlled Access Non-Interstate Speed Limit Study*** - review of the speed limits on controlled access non-interstate facilities for both safety and efficiency.
- ***Interstate Truck Lane Restriction Study*** - identify locations on the state highway system where the use of truck lane restrictions can safely improve overall traffic flow.

For more information, please contact us at:

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www.ncdot.org/doh/preconstruct/traffic/safety/TOI/

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North Carolina Department of Transportation

Traffic Operations and Investigations

The mission of the Traffic Engineering Safety Programs Unit is to provide traffic engineering services to the public as well as state and local officials and departments on a statewide basis while functioning as a liaison between the Traffic Engineering and Safety Systems Branch and the 14 highway divisions.

TRAFFIC ENGINEERING SAFETY PROGRAMS UNIT

The Traffic Engineering Safety Programs Unit consists of eight regions based in key locations across the state. These offices are the link between the Highway Division offices and the Traffic Engineering and Safety Systems Branch and operate closely with the 14 Division Traffic Engineers to provide traffic engineering services on a statewide basis. The Traffic Field Support Section is located in Raleigh and provides staff engineering assistance to the eight Regional Offices and addresses the traffic operational concerns of the general public, media and state and local officials.

Eastern & OBX Region: Located in Wilson and serves Divisions 1, 2 and 4.
Cape Fear Region: Located near Wilmington and serves Division 3.
Capital Region: Located in Raleigh and serves Division 5.
Sandhills Region: Located in Fayetteville and serves Divisions 6 and 8.
Triad Region: Located in Winston-Salem and serves Divisions 7 and 9.
Metrolina Region: Located near Charlotte and serves Division 10.
High Country & Foothills Region: Located in Shelby and serves Divisions 11 and 12.
Blue Ridge Mountains Region: Located in Asheville and serves Divisions 13 and 14.

Traffic Operation and Safety Evaluation

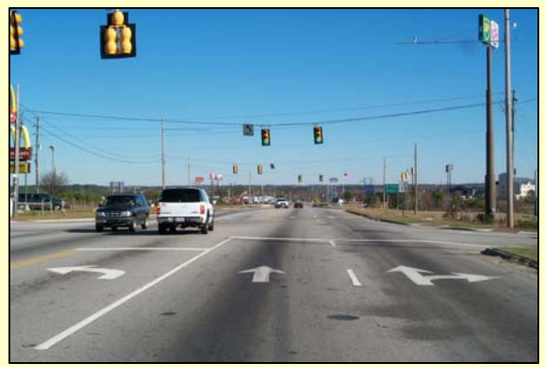
The Regional Traffic Offices investigate locations on the state highway system that experience operational or safety problems and recommend improvements. These improvements consist of revisions to or installation of traffic signals, speed zones, traffic and informational signs, pavement markings and other traffic related items. When the need for these improvements is identified the Regional Traffic Offices and the Traffic Field Support Section work to determine the estimated construction costs and find available funding sources.

Railroad-highway grade crossings are investigated for inclusion into the federal-aid Railroad-Highway Grade Crossing Safety Program. At-grade crossings are analyzed statewide to determine if additional signs, signals, lighting, pavement markings, flashers and/or gates are necessary.

Transportation Improvement Program (TIP) projects are reviewed for compliance with both state and federal traffic safety, congestion management, traffic control, signing, traffic signal and pavement marking guidelines. The proposed routing and alignment along with the need for Intelligent Transportation System (ITS) devices are also reviewed.

The Traffic Engineering Safety Programs Unit works to improve the operational efficiency and safety of North Carolina's streets and highways.

At-grade railroad-highway crossings are analyzed statewide to determine if improvements are necessary.



One of the safety improvements recommended by the Traffic Engineering Safety Programs Unit is the installation of new traffic signals.

Program Administration

The Traffic Field Support Section administers the following important traffic programs and systems:

- The annual $9.1 million Spot Safety Program which provides funding for relatively small and low cost safety projects that can be completed in a short period of time. Some examples of these projects are installing or revising traffic signals, improving roadway geometrics and constructing left turn lanes. Spot Safety projects provide rapid assistance for locations experiencing traffic operational or safety problems.
- The annual $4.1 million Federal-aid Hazard Elimination Program which provides funding for higher cost safety projects such as installing guardrail, realigning intersections, constructing crossovers, and turn lanes. The validity of this type of project is determined by a benefit-to-cost ratio which compares the cost of the project to the number of traffic accidents the improvement is expected to reduce.
- The Request Record Tracking System whereby requests by citizens, legislative members and others are logged, assigned and tracked through completion of an investigation and a response to the requestor.
- The Traffic Data Collection Program which involves contracting with private engineering firms to collect traffic count data for use in safety studies.
- The NCDOT's Highway Traffic Ordinance System for cataloging speed zones, no parking zones, turning prohibitions, stop signs, etc. ensures that the legal highway traffic ordinances are properly described and worded, inputted into a statewide database and distributed to appropriate municipal, county and state agencies.
- Serves as a contact for the trucking industry, Highway Patrol, DMV Enforcement, municipalities and others on matters related to STAA dimensioned vehicle (twin-trailer or 48-to-53 foot long single trailer) access routes or designated routes. Coordinates investigations of requests for access or designated routes.

Twin-trailer configuration used on designated routes in North Carolina.